



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,681	09/30/1999	KEIICHI SODA	2611-0114P	5738

7590 09/24/2003

BIRCH STEWART KOLASCH & BIRCH LLP  
P O BOX 747  
FALLS CHURCH, VA 220400747

EXAMINER

PHILPOTT, JUSTIN M

ART UNIT	PAPER NUMBER
----------	--------------

2665

DATE MAILED: 09/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/409,681

Applicant(s)

SODA ET AL.

Examiner

Justin M Philpott

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 10, 2003 has been entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are:

element(s) and/or process(es) within a communication network recited in lines 1-14 (i.e., claim 1 prior to most recent amendment) which provide a result recited in lines 15-18, namely, the result of: "the delay time in transferring the specific information from the slave device

Art Unit: 2665

through the at least one multiplexer to the master device and vice versa is substantially constant from each relay point within the at least one multiplexer”.

Specifically, as discussed in the previous office action (“Response to Arguments”, first paragraph), Applicant’s prior art FIGS. 16-18 teach a master-slave embodiment wherein a slave device transmits specific information for starting communications with a master device used for matching the sampling time in the master device and executes specific computing according to the specified information for returning the specific information from the master device according to the specific information for starting (i.e., lines 9-14 of the amended claim 1). Furthermore, it is noted herein that FIG. 18 teaches a master device (11) and a plurality of slave devices (12) connected to each other through at least one multiplexer (e.g., via 18) in a tree configuration with the master device (11) at the vertex for transmitting and receiving various types of specific information having a fixed length to and from each ones of the plurality of slave devices (12) (i.e., lines 1-6 of the amended claim 1). That is, prior art FIGS. 16-18 teach lines 1-6 and 9-14 of claim 1 (and the remaining lines 7-8 recite a round-robin technique well known in the art as discussed in the previous office action in the fourth paragraph of “Response to Arguments”). In the Amendment filed July 10, 2003, Applicant argues (page 23, second paragraph) that the teachings of FIGS. 16-18 do not suggest or disclose an embodiment wherein the delay time for transferring data within the relay point of the multiplexer is substantially constant as presently recited in the amended claim 1 (i.e., lines 15-18). However, in the amended claim 1, Applicant relies on the previously described embodiment to provide the additional result: wherein the delay time for transferring data within the relay point of the multiplexer is substantially constant. Since Applicant has declared that such a result is not possible within the teachings of FIGS. 16-

Art Unit: 2665

18, it would therefore not be possible to obtain such a result with the embodiment described in lines 1-14 of the amended claim.

Thus, in order to provide the newly recited result, “wherein the delay time in transferring the specific information from the slave device through the at least one multiplexer to the master device and vice versa is substantially constant from each relay point within the at least one multiplexer”, additional element(s) and/or process(es) within the communication network described in lines 1-14 would be required according to Applicant since the teachings of FIGS.

16-18 cannot provide the newly recited result in lines 15-18 of the amended claim 1.

Accordingly, Applicant may overcome this rejection by amending claim 1 to include such additional element(s) and/or process(es) which would enable the newly recited result (i.e., lines 15-18) of the amended claim 1. For example, Applicant may overcome this rejection by amending claim 1 to include the master-destined information selection unit recited in claim 4.

Claims 2-22 are dependent upon claim 1 and suffer the same deficiencies as that described above regarding claim 1.

***Allowable Subject Matter***

4. Claims 1-22 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Art Unit: 2665

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M Philpott whose telephone number is 703.305.7357. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on 703.308.6602. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.4750.

Justin M Philpott

*JMP*

  
HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600